REMARKS

Reconsideration and allowance of the subject application in view of the foregoing amendments and following remarks is respectfully requested.

Claims 1-25 and 27 are pending. Claims 4, 6, 14, and 18 have been amended. Claim 1 has been amended to recite that the loader resolves a function reference to either a body of the function or the body of the clone in order to better present the claimed subject matter. Claims 4, 6, 14, and 18 have been amended to correct minor typographical errors and better present the claimed subject matter. Claim 25 has been amended to incorporate subject matter similar to cancelled claim 26 and to incorporate language similar to amended claim 1. Claim 26 has been cancelled.

The specification has been amended at the paragraph beginning at page 20, line 16 to remove acoustic or electromagnetic waves from the recitation of computer-readable media.

Amended and un-amended claims 1-27 are not indefinite under 35 USC 112, second paragraph

The rejection of claims 1-27 under 35 USC 112, second paragraph, as being indefinite is believed overcome in view of the foregoing amendments and the following remarks. Withdrawal of the rejection is respectfully requested.

Claims 1 and 25

The rejection of claims 1 and 25 under 35 USC 112, second paragraph, is hereby traversed because the preamble does not appear to form a limitation of the claim. With respect to the limiting effect of the preamble, MPEP §2111.02 states as follows:

> The claim preamble must be read in the context of the entire claim. The determination of whether preamble recitations are structural limitations or mere statements of purpose or use "can be resolved only on review of the entirety of the [record] to gain an understanding of what the inventors actually invented and intended to encompass by the claim." *Corning Glass Works*, 868 F.2d at 1257, 9 USPQ2d at 1966. If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use

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of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) ("where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation").

Thus, in accordance with the MPEP the preamble may state a purpose or intended use and withdrawal of the rejection is respectfully requested.

Further, Applicants believe that the claim as a whole apprises one of ordinary skill in the art of the claim scope with a reasonable degree of clarity and particularity. The PTO is requested to identify more specifically the lack of definiteness, which Applicants continue to assert is not believed to exist, and/or suggest acceptable alternative language. For at least this reason, withdrawal of the rejection is respectfully requested.

<u>Claims 4, 6, 14, and 18</u>

The rejection of claims 4, 6, 14, and 18 is believed overcome in view of the foregoing amendments and withdrawal of the rejection is respectfully requested.

<u>Claims 17, 21, and 23</u>

The rejection of claims 17, 21, and 23 under 35 USC 112, second paragraph, is hereby traversed for at least reasons similar to those advanced above with respect to claims 1 and 25.

Further, claims 17, 21, and 23 each appear to recite a use of a clone, i.e., "building a library that include the body of the clone" (claim 17), "at link time for the program, mapping the clone to the section of the code" (claim 21), and "means for building a library that includes the body of the clone" (claim 23). In each claim, the clone appears to be used in some manner, e.g., claim 17 appears to use the body of the clone in building a library. Thus, contrary to the PTO's assertions, claims 17, 21, and 23

appear to be definite and recite a use of a clone. For at least this additional reason, withdrawal of the rejection is respectfully requested.

Amended and un-amended claims 1-16 and 22-27 are directed to statutory subject matter under 35 USC 101

Claims 1-16

The rejection of amended claim 1 as being directed to non-statutory subject matter is hereby traversed because amended claim 1 is believed to recite patentable subject matter. Notwithstanding the PTO's assertions, claim 1 has been amended to recite the resolution of a function reference to either a body of the function or the body of a clone depending on the availability of the function body of the clone. The resolution of a function reference in combination with the link time use of information mapping the clone to the function to satisfy a linker's requirement is believed to recite subject matter which produces a useful, concrete, and tangible result. For at least this reason, Applicants respectfully submit that amended claim 1, and claims dependent therefrom, i.e., claims 2-16, are directed to statutory subject matter as defined by 35 USC 101 and request withdrawal of the rejection.

Claims 22 and 25-27

The rejection of claims 22 and 25-27 as being directed to non-statutory subject matter is hereby traversed and believed overcome in view of the foregoing amendments to the specification. With respect to the assertion concerning "acoustic or electromagnetic waves," the foregoing amendments are believed sufficient to overcome the rejection.

With respect to the assertion that a paper tape listing "amounts to a mere instruction listing per se, which does not permit the functionality of the instructions to be realized," the PTO is believed to be incorrect because the instructions create a functional interrelationship with a computer. In other words, a computer is able to execute the encoded functions, regardless of whether the format is a magnetic tape, floppy disk, optical medium, paper-tape, or punch-cards. Further, as stated in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (1300 OG 142), Annex IV, section (a):

In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, for a method implemented as program instructions stored in a computer-readable medium. For at least this reason, withdrawal of the rejection is respectfully requested.

Based on each of the foregoing reasons, withdrawal of the rejection is respectfully requested.

<u>Claim 23</u>

The rejection of claim 23 as being directed to non-statutory subject matter is hereby traversed. Applicants fail to understand the PTO's assertion with respect to claim 23 because the PTO also asserts that claim 23 "is embodied entirely in the form of software" and does "not recite hardware components that would permit the functionality of the software to be realized." This is incorrect because claim 23 comprises features recited in means plus function language, i.e., "means for mapping" and "means for building," which is covered under 35 USC 112, 6th paragraph. The statute states, in relevant part, that "[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof . . ." See 35 USC 112, 6th paragraph.

Applicants respectfully submit that the claim is directed to statutory subject matter under 35 USC 101. Based on the foregoing, claim 23 is directed to a machine under 35 USC 101 and recites "hardware components" using means plus function language under 35 USC 112.

Further, Applicants submit that the subject matter claimed in claim 23 does not fall within the judicially defined exceptions to patentable subject matter, i.e., laws of nature, natural phenomena, or abstract ideas.

For at least the foregoing reasons, Applicants respectfully submit that claim 23 is directed to statutory subject matter as defined by 35 USC 101 and request withdrawal of the rejection.

Based on each of the foregoing reasons, Applicants respectfully request withdrawal of the rejection of claims 1-16 and 22-27.

Claims 23 and 25 are not anticipated by _Bates_ et al. (US Patent 6,895,580)

The rejection of claims 23 and 25 under 35 USC 102(e) as being anticipated by _Bates_ is hereby traversed. A rejection based on 35 U.S.C. §102 requires every element of the claim to be included in the reference, either directly or inherently.

Claim 23

With respect to claim 23, in the absence of any art-based rejection of claim 23, withdrawal of the rejection is respectfully requested.

Claims 25 and 27

Amended claim 25 is patentable over _Bates_ because the reference fails to disclose or suggest every element of amended claim 25. The PTO admits, with respect to claim 26, that _Bates_ fails to disclose the claimed "at link time for the program, if no function body of the clone is accessible by a linker, then the linker using the information mapping the clone to the function to satisfy a linker's requirement; and at load time for the program, if no function body of the clone is accessible by a loader, then the loader, based on the information mapping the clone to the function, allowing selection of a body of the function; and if the body of the clone is accessible by the loader, then the loader allowing selection of the body of the clone." Official Action at page 17 line 5 through page 18, line 22. For at least this reason, withdrawal of the rejection is respectfully requested.

Based on at least the foregoing, claim 25 is patentable over _Bates_ and the rejection is respectfully requested to be withdrawn.

Claim 27 depends from claim 25, includes further features, and is patentable over _Bates_ for at least the reasons advanced above with respect to claim 25. The rejection of claim 27 should be withdrawn.

Claims 1-16, 21, 22, and 26 are patentable over _Bates_ in view of _Saboff_ et al. (US 6,202,205) and in view of _Hunter_ et al. (US 5,920,721)

The rejection of claims 1-16, 21, 22, and 26 under 35 USC 103(a) as being unpatentable over _Bates_ in view of _Saboff_ and in view of _Hunter_ is hereby traversed. There are at least four reasons claims 1-16, 21, 22, and 26 are patentable and the rejection should be withdrawn.

First, _Bates_ fails to disclose or suggest the use of generated information mapping the clone to the function as claimed in claim 1, i.e., prior to link time and/or load time for use during link time and/or load time for the program. For example, as claimed in claim 1, the information mapping the clone to the function is generated prior to link time for the program because at link time for the program, if no function body of the clone is accessible by the linker, the linker uses the generated information to satisfy the linker's requirement.

In contrast, _Bates_ clone record appears to be limited to generation and use during a compile time and fails to disclose or suggest use of the clone record at either link time or load time. Specifically, at column 6, lines 34-45, _Bates_ states that "[r]outine cloning consistent with the invention is typically implemented within a programming or developer environment that includes a compiler." _Bates_' routine cloning appears to be described in conjunction with "a general compilation routine executed by [a] compiler." _Bates_ at column 6, line 41. Thus, _Bates_ fails to disclose the use of generated information mapping the clone to the function as claimed in claim 1. For at least this reason, withdrawal of the rejection is respectfully requested.

The PTO admits that _Bates_ fails to disclose at link time for the program, if no function body of the clone is accessible by a linker, then the linker using the information mapping the clone to the function to satisfy a linker's requirement.

Second, _Saboff_ fails to disclose or suggest at link time for the program, if no function body of the clone is accessible by a linker, then the linker using the information mapping the clone to the function to satisfy a linker's requirement as claimed in claim 1.

The PTO asserts that *Saboff* describes "a linker that uses, at link time, an interface library to satisfy the linker's requirements (see, for example, column 6, lines 53-58)." Official Action at page 10, lines 9-10. However, *Saboff*'s linker appears to describe a linker using the interface library to link with the application, however, the interface library does not appear to include information mapping a clone to a function as claimed in claim 1. Rather, *Saboff* appears to describe replacing an implementation library with an optimized version of the implementation library without describing information mapping a clone to a function. *Saboff* appears to describe a method of dynamic optimization of shared libraries. *Saboff* at column 18, line 64 through column 19, line 9. Further, *Saboff* appears to describe the interface library being used as a proxy interface, i.e., a placeholder, for an implementation library and not as information mapping a clone to a function, e.g., interface library fails to map an optimized implementation library to an un-optimized implementation library. For at least this reason, withdrawal of the rejection is respectfully requested.

Third, the PTO has failed to set forth a prima facie case of obviousness with respect to the combination of *Saboff* with *Bates*. *Bates* appears to describe operations being performed at compile time and *Saboff*, in contrast, appears to describe operations being performed at run time. Further, *Bates* appears to describe routine cloning in contrast to the library optimization of *Saboff*. The PTO has failed to articulate a reasonable rationale for why a person of ordinary skill in the art at the time of the present invention would have been motivated to combine *Bates* and *Saboff* as asserted. The Official Action states that a person of ordinary skill would have combined *Bates* and *Saboff* "as *Saboff* suggests" without identifying the suggestion of *Saboff*. Official Action at page 10, line 19. For at least this reason, withdrawal of the rejection is respectfully requested.

Further, the PTO asserts that the combination of *Bates* and *Saboff* would enable the provision of a "clone in a dynamically replaceable library while still satisfying the requirements of the linker." Official Action at page 10, lines 20-22. This is incorrect. *Saboff* appears to describe replacement of an existing library with an optimized version

of the library without describing cloning occurring with respect to either library. For at least this reason, withdrawal of the rejection is respectfully requested.

The PTO admits that *Bates* fails to disclose at load time for the program, if no function body of the clone is accessible by a loader, then the loader, based on the information mapping the clone to the function, resolving a function reference to a body of the function; and if the body of the clone is accessible by the loader, then the loader resolving the function reference to the body of the clone.

Fourth, *Hunter* fails to disclose or suggest at load time for the program, if no function body of the clone is accessible by a loader, then the loader, based on the information mapping the clone to the function, resolving a function reference to a body of the function; and if the body of the clone is accessible by the loader, then the loader resolving the function reference to the body of the clone. *Hunter* appears to describe a load time patching mechanism to enable use of a newer instruction on newer computers and not load time resolving of a function reference. "For example, a cooperating entity such as a loader program can patch in the better-suited code sequence." *Hunter* at column 2, lines 34-36. *Hunter* appears to describe run-time patching to select a correct instruction. *Hunter* fails to disclose or suggest use of clones of functions as claimed in claim 1. For at least this reason, withdrawal of the rejection is respectfully requested.

Further, the PTO asserts that the combination of *Bates* and *Hunter* would enable "*Bates* to fall back to the function as a default if the clone is not accessible when the program is loaded" without identifying a teaching *Hunter* or articulating a reasonable rationale for the asserted combination. That is, the PTO appears to rely on the combination for the motivation for the combination without identifying why a person of skill in the art would have been motivated to combine *Bates* and *Hunter*. For at least this reason, withdrawal of the rejection is respectfully requested.

Based on at least each of the foregoing reasons, claim 1 is patentable over *Bates*, singly or in combination with, *Saboff,* and *Hunter*. Withdrawal of the rejection is respectfully requested.

Claims 2-16 depend, either directly or indirectly, from claim 1, include further features, and are patentable over *Bates*, *Saboff*, and *Hunter* for at least the reasons advanced above with respect to claim 1. The rejection of claims 2-18 should be withdrawn.

Claim 21 is patentable over *Bates* in view of *Saboff* and *Hunter* for at least reasons similar to those advanced above with respect to claim 1 and withdrawal of the rejection is respectfully requested.

Claim 22 depend from claim 21, include further features, and is patentable over *Bates* in view of *Saboff* and *Hunter* for at least the reasons advanced above with respect to claim 21. The rejection of claim 22 should be withdrawn.

The rejection of claim 26 is believed moot in view of the cancellation of claim 26.

Claims 17-20, 23, and 24 are patentable over *Bates* in view of *Saboff*

The rejection of claims 17-20, 23, and 24 under 35 USC 103(a) as being unpatentable over *Bates* in view of *Saboff* is hereby traversed. Reasons similar to those advanced above with respect to claim 1 and *Bates* in view of *Saboff* apply equally with respect to claims 17-20, 23, and 24 and the rejection is respectfully requested to be withdrawn.
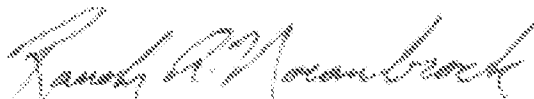
Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 08-2025 and please credit any excess fees to such deposit account.

Respectfully submitted,

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